

REMARKS

The Examiner is thanked for the due consideration given the application.

Claims 8-19 are pending in the application. Claim 8 has been amended to improve the language in a non-narrowing fashion. Claims 15-19 are newly presented. New claim 15 finds support in the specification at page 7, lines 12-13. New claim 16 finds support in the specification at page 5, lines 13-21. New claims 17 and 19 find support in the specification at page 6, lines 2-3. New claim 18 generally sets forth subject matter found in the previous claims.

No new matter is believed to be added to the application by this amendment.

Rejection Under 35 USC §112, Second Paragraph

Claims 8-14 have been rejected under 35 USC §112, second paragraph as being indefinite. This rejection is respectfully traversed.

The Official Action asserts that the limitation "fixed member portion" is not clear. However, claim 8 has been amended to clarify this recitation.

The Official Action requests clarification regarding the limitation "fixed member portion" in light of the specification. However, this language is reflected in the specification at, e.g., page 2, lines 33-35.

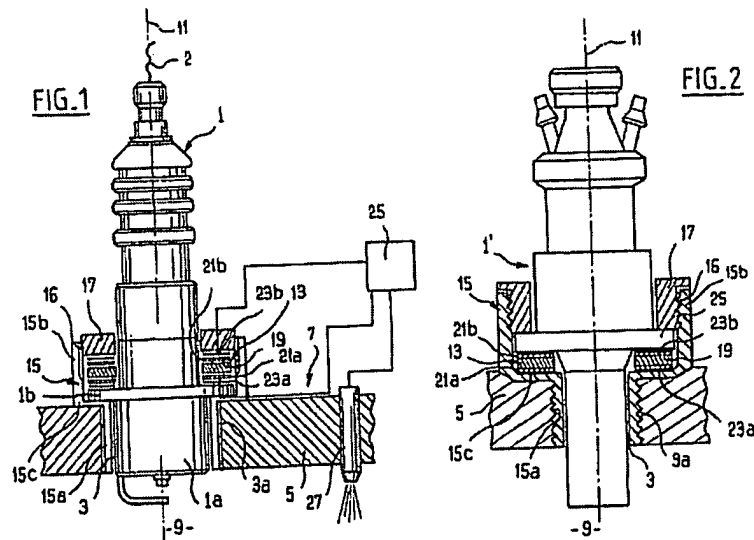
The claims are thus clear, definite and have full antecedent basis.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection Over HARADA

Claims 8-14 have been rejected under 35 USC §102(b) as being anticipated by HARADA (U.S. Patent 4,392,082). This rejection is respectfully traversed.

The present invention pertains to measuring pressure in an internal combustion engine that is illustrated, by way of example, in Figures 1 and 2 of the application, which are reproduced below.

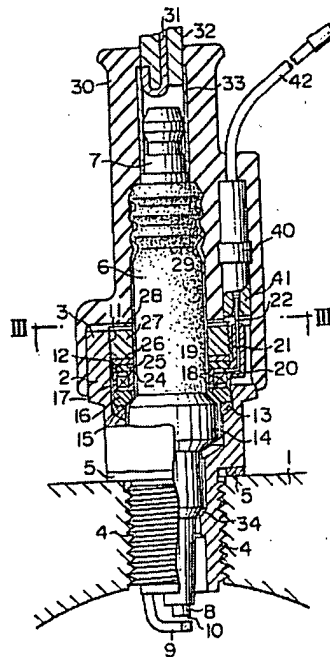


Figures 1 and 2 show a functional member 1, 1' such as a spark plug or fuel injector. A pressure sensor device 19 is interposed between a fixed member portion and a confronting portion.

Claim 8 of the present invention recites: "said member fixed to said wall and having said portion outside said orifice being a fixed member portion being externally exposed and releasable from the remainder of said fixed member such that upon removal of said fixed member portion, said functional member can be removed and replaced."

HARADA pertains to a pressure sensitive ignition plug. The Official Action refers to Figure 1 of HARADA, which is reproduced below.

FIG. 1



In the Official Action, the Examiner asserts that the insulator assembly 6 of HARADA is equivalent with the functional member (1, 10, 30) of the present invention. However, a spark

plug is not formed from a sole insulator. One with skill in the spark plug art would recognize that a spark plug is formed from many assembled elements (which cannot be separated that easily). When the spark plug is assembled and when installing a spark plug on an engine, one **cannot** only handle the sole insulator assembly 6.

This is explained in HARADA: the plug is screwed (the present invention does not screw our functional member) on the engine via its outer envelope (the body 2). See column 4, lines 13-33 of HARADA, which states:

The pressure-sensitive ignition plug of the described embodiment is mounted on the engine in the following procedure. First of all, the plug body incorporating the pressure-sensitive unit is screwed into the threaded bore of the cylinder head by means of a tightening tool which is typically a plug wrench adapted to fit the hexagonal portion 3 of the plug body 2. Then, the rubber sheath 30 in which the amplifier unit is embedded is mounted to cover the insulator assembly 6 and the hexagonal portion 3 of the plug body in such a manner that the junction portion of the amplifier unit aligns and contact with the signal terminal of the pressure sensing unit.

The demounting of the ignition plug from the engine can be made in the reverse procedure, namely by removing the rubber sheath from the plug body and then unscrewing the plug body. It will be seen that the pressure-sensitive ignition plug of the described embodiment can be attached and detached to and front the engine and can be assembled in quite an. easy manner.

The Harada pressure-sensitive ignition plug is thus described as being able to be easily assembled and removed. One

could not do it easily if the need to assemble all the elements of the spark plug on the engine is chosen as the Official Action infers.

On the other end, it is quite impossible to do so, as the pressure sensor needs to be positioned with a specific and accurate pre-load, which is very important for the future measurement. If one wants to assemble the spark plug on the engine (as is posited in the Official Action), it will take a lot of time and the sensor will not work properly. It is technically non-feasible to consider a spark plug as a sum of elements which can be assembled *in situ*.

Furthermore, the spark plug shown in Figure 1 of the present application is a standard one, so it is also formed from an insulator placed in a body, and the present invention does not claim the insulator to be a functional member.

As a result, HARADA fails to disclose each and every element of claim 8 of the present invention. HARADA thus fails to anticipate claim 8 of the present invention. Claims depending upon claim 8 are patentable for at least the above reasons.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Claims 15-19

Claims 15-19 have been newly presented for consideration on the merits. It is believed that claims 15-19 are patentable for at least the above reasons.

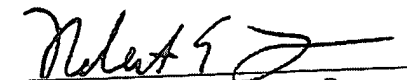
Conclusion

The rejections are believed to have been overcome, obviated or rendered moot and that no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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